LIVING SCIENCE CLASS6 SOLUTION CHAPTER 2. COMPONENTS OF FOOD

P. 17 Oral Questions For Formative Assessment

1. carbohydrates, fats, proteins, vitamins, minerals

2. sugary food, sugars release energy quickly than other energy giving foods

3. They do not provide us quick energy. But when we are short of energy, the body uses them.

4. A 10-year-old child. It is necessary for growth of the body which is the case for the child. Per kilogram body weight is specified here because protein requirement increases if your weight is more.

5. Plant food, it is a kind of carbohydrate

P. 21 Oral Questions For Formative Assessment

1. a. kwashiorkor b. night blindness

2. a. rickets, deficiency of vitamin D
   b. scurvy, deficiency of vitamin C
   c. anemia, deficiency of iron
   d. goitre, deficiency of iodine in the diet

p. 21 For Formative and Summative Assessment

A. 1. c 2.a 3.c 4. b 5. d 6. a 7. a 8. b
   9. d 10. d

B. 1. deficiency 2. true 3. Skin 4. vitamin D 5. calcium 6.water

C. 1. Nutrients are divided into the following classes

a. Carbohydrates give us energy to work. For example, starch, sugar and so on.

b. Fats give us more energy than starch or sugar. For example, oil, nuts and so on.

c. Proteins help us to grow. For example, eggs, fish and so on.

d. Vitamins are essential for the proper working of the body. For example, milk, green leafy vegetables and so on.

e. Minerals are required by our body in small quantities in the diet to maintain good health For example, liver, eggs, milk and so on.

Carbohydrates and fats provide energy to the body. However, carbohydrates give instant energy.
2. Foods rich in vitamins and minerals are known as protective foods. They protect our body against
diseases. They are essential for the proper working of the body and to maintain good health.
3. Proteins are needed for the growth and repair of the body. They build new cells and hence are body-
building foods.
4. High or prolonged exposure to heat. For example, vitamin C gets destroyed during cooking due to heat.
5. Sugars and starch are two kinds of carbohydrates. Sugars provide us quick energy.
6. Vitamins and minerals are needed by our body in small quantities only.
7. In marasmus, the child becomes very thin and loose folds of skin can be seen all over the body.
8. The incidence of goiter among the people living in the Himalayan region was quite high because the
iodine content of soil and water is low there.
D. 1. a. For normal growth, healthy eyes and skin.  b. For healthy growth and strong blood vessels
c. Helps to use calcium for formation of strong bones and teeth.  d. Helps in the clotting of blood.
2. a. For strong bones and teeth.  b. For the proper functioning of the nervous system.
c. For growth, for keeping cells and blood healthy.
d. For the formation of the substance that helps red blood cells carry oxygen to body cells.
3. We should drink 6 - 8 glasses of water every day because life processes cannot occur without water. It
only serves as a solvent in which all chemical reactions take place. It helps our body to absorb nutrients
from food and transport them throughout the body. It collects wastes from different parts of the body, and
removes them from the body in the form of urine and sweat.
4. A balanced diet is one that contains the proper amounts of each nutrient. However, balanced diet is not
the same for everyone. It depends on age, sex and the type of work that one does.
5. Diseases caused by lack of essential nutrients such as vitamins and minerals are known as deficiency
diseases.
The four deficiency diseases and the associated nutrients:
   (i) Night blindness is caused by the deficiency of vitamin A.
   (ii) Beri-beri is a disease caused by the deficiency of vitamin B1.
   (iii) Anaemia is caused by the deficiency of iron.
   (iv) Goitre is caused by the deficiency of iodine.
6. Roughage adds bulk to our food. It prevents constipation and ensures proper bowel movement. It also reduces the risk of heart diseases and bowel cancer.

HOTS Questions

1. Constipation is common among people in the western countries who eat more meat and processed food and not enough plant food because of a diet low in fibre necessary for the proper functioning of the digestive system. Fibre adds bulk to the food and prevents constipation by ensuring proper bowel movement.

2. No. Because the engineer does not do physical work and hence does not require the extra calories that eating more carbohydrates and fats will provide. In fact this may make him gain weight and hence become less healthy.

3. No, because though milk contains most nutrients, it does not provide roughage which is essential for proper digestion and bowel movements.

4. In such a voyage it would be difficult to get fresh fruits and vegetables that are necessary to provide vitamin C, a lack of which would lead to gum problems (scurvy).